

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Math: \_\_\_\_\_

## Lesson 1 and 2 Review Homework

<p>1. <math>26 = 4 + 2b</math></p> <p><math>-4 -4</math></p> <p><math>22 = 2b</math></p> <p><math>\div 2 \div 2</math></p> <p><math>11 = b</math></p> <p><math>26 \stackrel{?}{=} 4 + 2 \cdot 11</math></p> <p><math>26 = 4 + 22 \checkmark</math></p>	<p>2. <math>-6t + (-4) = 14</math></p> <p><math>+4 +4</math></p> <p><math>-6t = 18</math></p> <p><math>\div -6 \div -6</math></p> <p><math>t = -3</math></p> <p>Check</p> <p><math>-6(-3) + (-4) \stackrel{?}{=} 14</math></p> <p><math>18 + -4 = 14 \checkmark</math></p>
<p>3. <math>4a + 1 - a = 19</math></p> <p><math>3a + 1 = 19</math></p> <p><math>-1 -1</math></p> <p><math>3a = 18</math></p> <p><math>\div 3 \div 3</math></p> <p><math>a = 6</math></p> <p>Check</p> <p><math>4 \cdot 6 + 1 - 6 \stackrel{?}{=} 19</math></p> <p><math>24 + 1 - 6 = 19</math></p> <p><math>25 - 6 = 19 \checkmark</math></p>	<p>4. <math>4d + 2d - 3d = 27</math></p> <p><math>6d - 3d = 27</math></p> <p><math>3d = 27</math></p> <p><math>\div 3 \div 3</math></p> <p><math>d = 9</math></p> <p>Check</p> <p><math>4 \cdot 9 + 2 \cdot 9 - 3 \cdot 9 \stackrel{?}{=} 27</math></p> <p><math>36 + 18 - 27 = 27</math></p> <p><math>54 - 27 = 27 \checkmark</math></p>
<p>5. <math>3(2y - 6) = 42</math></p> <p><math>6y - 18 = 42</math></p> <p><math>+18 +18</math></p> <p><math>6y = 60</math></p> <p><math>\div 6 \div 6</math></p> <p><math>y = 10</math></p> <p><math>3(2 \cdot 10 - 6) = 42</math></p> <p><math>3(20 - 6) = 42</math></p> <p><math>3 \cdot 14 = 42 \checkmark</math></p>	<p>6. <math>m + 4(2m - 3) = -3</math></p> <p><math>m + 8m - 12 = -3</math></p> <p><math>9m - 12 = -3</math></p> <p><math>+12 +12</math></p> <p><math>9m = 9</math></p> <p><math>\div 9 \div 9</math></p> <p><math>m = 1</math></p> <p>Check</p> <p><math>1 + 4(2 \cdot 1 - 3) = -3</math></p> <p><math>1 + 4(2 - 3) = -3</math></p> <p><math>1 + 4(-1) = -3</math></p> <p><math>1 + -4 = -3 \checkmark</math></p>

**Challenge:** The sum of three consecutive odd numbers is 99. Do the following to learn a method for finding the numbers.

1. Let  $n$  be the first number. Write an expression for each of the other two in terms of  $n$ .

$$\begin{array}{l} n \\ n+1 \\ n+2 \end{array}$$

2. Write and solve an equation to find the three numbers.

$$n + (n+1) + (n+2) = 99$$

$$\begin{array}{r} 3n + 3 = 99 \\ -3 \quad -3 \end{array}$$

$$3n = 96$$

$$n = 32$$

$$1. (1.2x + 7.5x + 2.1 = 63) 10$$

$$12x + 75x + 21 = 630$$

$$\quad \quad \quad -21 \quad -21$$

$$87x = 609$$

$$x = 7$$

$$\begin{array}{r} 87 \\ 7 \\ \hline 609 \end{array}$$

$$2. \left( \frac{1}{4}k + 2 = \frac{3}{4} \right) 4$$

$$k + 8 = 3$$

$$\quad \quad -8 \quad -8$$

$$k = -5$$

$$3. 9y - 16.3 = 5.3$$

$$\quad \quad +16.3 \quad +16.3$$

$$9y = 21.6$$

$$y = 2.4$$

$$\begin{array}{r} 2.4 \\ 9 \overline{) 21.6} \\ \underline{18} \\ 36 \end{array}$$

$$4. h + 3h + 4h = 100$$

$$8h = 100$$

$$\div 8 \quad \div 8$$

$$h = \frac{100}{8} = \frac{25}{2} = 12\frac{1}{2}$$

$$h = 12\frac{1}{2}$$

$$5. \left( \frac{7}{8}y - \frac{5}{8} = 2 \right) 8$$

$$7y - 5 = 16$$

$$\quad \quad +5 \quad +5$$

$$7y = 21$$

$$\div 7 \quad \div 7$$

$$y = 3$$

$$6. -15.3 = -7.5k + 55.2$$

$$\quad \quad -55.2 \quad \quad -55.2$$

$$-70.5 = -7.5k$$

$$\div -7.5 \quad \div -7.5$$

$$9.4 = k$$

$$\begin{array}{r} 9.4 \\ 7.5 \overline{) 70.5} \\ \underline{67.5} \\ 300 \\ \underline{300} \\ 0 \end{array}$$